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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,594	09/18/2000	Wolfgang O. Budde	PHD 99,127	4059

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EXAMINER

BATES, KEVIN T

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 10/01/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,594

Applicant(s)

BUDDE ET AL.

Examiner

Kevin Bates

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 9-18-2000 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Objections

Claim 9 is objected to because of the following informalities: There is a comma missing on line 2 after the word connections and also on line 3 after the word component. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 3, 8, 9, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Karasawa (6,091,740).

Regarding claim 1, Karasawa discloses a network comprising a plurality of network nodes, characterized in that at least part of the network nodes are directly intercoupled via at least one star node (Column 3, lines 13 – 16), in that the star node contains a plurality of star interfaces (Column 3, lines 31 – 32) which are assigned to at least one network node and in that (Column 3, lines 34 – 35), in dependence on a pilot signal (Column 1, lines 54 – 67), one star interface always conveys a message from the assigned network node to the other star interfaces (Column 3, lines 44 – 46), or from another star interface to at least one of the assigned network nodes (Column 3, lines 41 – 44).

Regarding claim 2, Karasawa discloses that each network node in the network is assigned a certain periodically recurrent time section for the transmission of its messages, (Column 1, lines 56 – 58 and Column 1, lines 65 – 67, the first signal determines a periodic time slot for each network node to keep them all at a constant bit rate) and in that a network node comprises a pilot signal generator (Column 4, lines 46 – 49) which generates a pilot signal (BSC byte) which denotes either the whole assigned time section or the beginning and end of the time section (Column 4, lines 4 – 13).

Regarding claim 7, Karasawa discloses that at least one network node is assigned a plurality of star interfaces of which only one is provided for transferring

messages in dependence on the state of the assigned network node (Column 2, lines 41 – 48) where the state is either constant-bit-rate or burst.

Regarding claim 8, Karasawa discloses that at least one network node contains at least two pilot signal generators (Column 1, lines 56 - 64) and two multiplexers (Column 2, lines 18 – 22) for combining the pilot signal generated by the assigned pilot signal generator with a message (Column 3, lines 63 – 65), and in that a control unit decides over which line connection and over which assigned star interface the message combined with a pilot signal is transmitted (Column 7, lines 16 – 19).

Regarding claim 3, Karasawa discloses that each star interface comprises a first and second switch element (Upstream classifier controls upstream cells and schedulers control downstream cells) and a pilot signal detector (BSC decoder) (Column 4, 14 - 18), in that the first switch element in activated state is provided for allowing a message to pass from the assigned network node to the other star interfaces (Column 4, lines 37 – 44) and the second switch element in activated state is provided for allowing a message to pass from the other star interfaces to the assigned network node (Column 4, lines 52 – 60) and in that the pilot signal detector is provided for activating a first switch element and deactivating a second switch element (Column 4, lines 53 – 60) or deactivating the first switch element and activating the second switch element in dependence on a pilot signal from the assigned network node (Column 5, lines 15 – 24 or Figure 3).

Regarding claim 10, Karaswa discloses a network node in a network comprising further network nodes, characterized in that the network node is provided for coupling to

further network nodes via at least one star node (Column 3, lines 13 – 16) and in that the network node is provided for indicating a transmission of a message to a star interface of the star node (Column 3, lines 44 – 46) together with a pilot signal (Column 3, lines 63 – 65).

Regarding claim 11, Karasawa discloses a star node in a network for coupling a plurality of network nodes to a plurality of star interfaces (Column 3, lines 31 – 32), which are assigned to at least one network node and which, in dependence on a pilot signal (Column 1, lines 54 – 67), are each provided for transferring a message from the assigned network node to the other star interfaces (Column 3, lines 44 – 46), or from another interface to at least one of the assigned network nodes (Column 3, lines 41 – 44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa in view of Kobayashi (4,694,453).

Regarding claim 4, Karasawa lacks the idea that the first and second switch elements are each a switchable amplifier. Kobayashi teaches a star node and a star interface that has an amplifier for adjusting signals on the upstream and downstream (Figure 5, label 12 and 20) before the switched input to the necessary voltages so that

signals can be read correctly (Column 4, lines 21 – 23). So Kobayashi teaches the idea that the first and second switch elements are each a switchable amplifiers. It would have been obvious at the time the invention was made to use Kobayashi's amplifiers in order to have an element to ensure that the signals that each of the star interfaces were sending and receiving were of the proper voltage.

Regarding claim 5, Karasawa lacks the idea that a star interface is provided for generating a release signal when the assigned network node denotes a message transmission by a pilot signal, in that the lines conveying the release signal of each star interface are coupled via an OR combination and in that the OR combination transfers the release signal to all the star interfaces of the star node. Kobayashi teaches having a test signal sent out before a transmission (Column 2, lines 31 – 39), which gets sent along the bus (Figure 1, element 3 and Column 3, lines 12 – 14) to the star node (Figure 1, element 1). The test signal is originated in part from an OR gate (Figure 7, element 37 and Column 5, lines 61 – 62). So Kobayashi teaches the idea that a star interface is provided for generating a release signal when the assigned network node denotes a message transmission by a pilot signal, in that the lines conveying the release signal of each star interface are coupled via an OR combination and in that the OR combination transfers the release signal to all the star interfaces of the star node. It would have been obvious to one of ordinary skill in the art at the time the invention was made in order to have a signal to the star node and to other interfaces in order to become prepared to receive a transmission for that certain node (Column 5, lines 33 – 35).

Regarding claim 6, Kobayashi teaches in his test signal that the OR combination is an OR gate or a wired OR combination (Column 5, lines 61 – 62).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa in view of Schenkyr (5,218,600).

Regarding claim 9, Karasawa discloses a control unit (optical subscriber unit) and the control unit checks the presence of the pilot signal on the various line connections by evaluating pilot signal detectors (Column 5, lines 6 – 11), and, during the transmission of the message, the presence of the pilot signal on all the line connections (Column 4, lines 45 – 49), except for the line connection that transmits the message that has been transmitted. Karasawa does not explicitly indicate that the control unit is provided for testing the operability of the star interfaces, of the line connections, and of a circuit component in the network node. Schenkyr teaches scanning for interruption of a connecting line or a node failure in a network system (Column 2, lines 16 – 19) by using empty signals to monitor the line (Column 1, lines 55 – 57). So Schenkyr teaches the idea of testing the operability of the star interfaces, of the line connections, and of a circuit component in the network node. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Schenkyr's ideas of monitoring the state of the network so that the system can know of a problem and attempt to compensate (Column 2, lines 16 – 24).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. 6493335 issued to Darcie

U. S. Patent No. 5764630 issued to Natali

U. S. Patent No. 6076117 issued to Billings

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (703) 605-0633. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

KB
September 9, 2003



HOSAIN ALAM
SUPERVISORY PATENT EXAMINER